

1. A method comprising:

(a) receiving a desired time-of-arrival; ~~and~~

(b) selecting one of a plurality of entries of a timetable based on:

- (i) the current time,
- (ii) said desired time-of-arrival, and
- (iii) a non-negative penalty function;

wherein each of said entries comprises:

- (i) a scheduled time-of-departure, and
- (ii) a value that indicates a scheduled time-of-arrival; and

wherein said penalty function is:

- (i) monotonically increasing in travel time, wherein said travel time equals the difference between an actual time-of-arrival and an actual time-of-departure,
- (ii) monotonically increasing in  $\Delta = (\text{said actual time-of-arrival minus said desired time-of-arrival})$  over at least one interval  $(\Delta_1, \Delta_2)$  of  $\Delta$  wherein  $\Delta_2 > \Delta_1 \geq 0$ , and
- (iii) monotonically decreasing in  $\Delta$  over at least one interval  $(\Delta_3, \Delta_4)$  of  $\Delta$

wherein  $\Delta_3 < \Delta_4 \leq 0$ .

*and (c) determining a desired departure time based upon the selected one entry*

2. The method of claim 1 wherein each of said entries also comprises:

- (iii) a first metric for said scheduled time-of-departure, and
- (iv) a second metric for said scheduled time-of-arrival; and

wherein said penalty function is based on said first metric and on said second metric.

3. The method of claim 2 wherein each of said first metric and said second metric is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

4. The method of claim 1 wherein said timetable is associated with a departure location, said method further comprising:

- (c) receiving a current location;
- (d) estimating a metric of travel time from said current location to said departure location; and

(e) determining whether to output a signal based on:

- (i) said current time,
- (ii) the scheduled time-of-departure of the entry selected at (b), and
- (iii) said metric estimated at (d).

5. The method of claim 4 wherein said metric estimated at (d) is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

6. A method comprising:

- (a) receiving a desired time-of-arrival associated with a destination location; and
- (b) selecting one of a plurality of entries of a timetable, wherein said timetable is associated with a discharge location, based on:
  - (i) <sup>a</sup>the current time,
  - (ii) said desired time-of-arrival,
  - (iii) a first metric of estimated travel time from said discharge location to said destination location, and
  - (iv) a non-negative penalty function;

wherein each of said entries comprises:

- (i) a scheduled time-of-departure, and
- (ii) a value that indicates a scheduled time-of-arrival; and

wherein said penalty function is:

- (i) monotonically increasing in travel time, wherein said travel time equals the difference between an actual time-of-arrival at said destination location and an actual time-of-departure,
- (ii) monotonically increasing in  $\Delta = (\text{said actual time-of-arrival at said destination location minus said desired time-of-arrival at said destination location})$  over at least one interval  $(\Delta_1, \Delta_2)$  of  $\Delta$  wherein  $\Delta_2 > \Delta_1 \geq 0$ , and
- (iii) monotonically decreasing in  $\Delta$  over at least one interval  $(\Delta_3, \Delta_4)$  of  $\Delta$

wherein  $\Delta_3 < \Delta_4 \leq 0$  *and (c) determining a desired departure time based upon the selected one entry*

7. The method of claim 6 wherein each of said entries also comprises:

- (iii) a second metric for said scheduled time-of-departure, and
- (iv) a third metric for said scheduled time-of-arrival; and

wherein said penalty function is based on said second metric and on said third metric.

**8.** The method of claim 7 wherein each of said second metric and said third metric is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

**9.** The method of claim 6 wherein said timetable is associated with a departure location, said method further comprising:

- (c) receiving a current location;
- (d) estimating a second metric of travel time from said current location to said departure location; and
- (e) determining whether to output a signal based on:
  - (i) said current time,
  - (ii) the scheduled time-of-departure of the entry selected at (b), and
  - (iii) said second metric.

**10.** The method of claim 9 wherein said second metric is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

**11.** A method comprising:

- (a) receiving a desired time-of-arrival associated with a destination location; and
- (b) selecting one of a plurality of entries of a first timetable and one of a plurality of entries of a second timetable, wherein said first timetable is associated with a first discharge location, and wherein said second timetable is associated with a second departure location and a second discharge location, and wherein said selecting is based on:
  - (i) the current time,
  - (ii) said desired time-of-arrival,
  - (iii) a first metric of estimated travel time from said first discharge location to said second departure location,
  - (iv) a second metric of estimated travel time from said second discharge location to said destination location, and
  - (v) a non-negative penalty function;

wherein each of said entries of said first timetable and of said second timetable comprises:

- (i) a scheduled time-of-departure, and

(ii) a value that indicates a scheduled time-of-arrival; and

wherein said penalty function is:

(i) monotonically increasing in travel time, wherein said travel time equals the difference between an actual time-of-arrival at said destination location and an actual time-of-departure,

(ii) monotonically increasing in  $\Delta = (\text{said actual time-of-arrival at said destination location minus said desired time-of-arrival at said destination location})$  over at least one interval  $(\Delta_1, \Delta_2)$  of  $\Delta$  wherein  $\Delta_2 > \Delta_1 \geq 0$ , and

(iii) monotonically decreasing in  $\Delta$  over at least one interval  $(\Delta_3, \Delta_4)$  of  $\Delta$

wherein  $\Delta_3 < \Delta_4 \leq 0$

*and (c) determining a desired departure time based upon the selected one entry from both the first timetable and the second timetable*

12. The method of claim 11 wherein each of said entries of said first timetable and of said second timetable also comprises:

(iii) a third metric for said scheduled time-of-departure, and

(iv) a fourth metric for said scheduled time-of-arrival; and

wherein said penalty function is based on said third metric and said fourth metric.

13. The method of claim 12 wherein each of said third metric and said fourth metric is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

14. The method of claim 11 wherein said first timetable is also associated with a first departure location, said method further comprising:

(c) receiving a current location;

(d) estimating a third metric of travel time from said current location to said first departure location; and

(e) determining whether to output a signal based on:

(i) said current time,

(ii) the scheduled time-of-departure of the entry of said first timetable selected at (b), and

(iii) said third metric.

15. The method of claim 14 wherein said second metric is selected from the group consisting of: a mean value; a minimum value; a maximum value; a variance; an  $n$ th-order moment, wherein  $n$  is an integer greater than 2; and a probability distribution.

**16.** An apparatus comprising:

a receiver for receiving a desired time-of-arrival; and

a processor for selecting one of a plurality of entries of a timetable based on:

- (i) <sup>a</sup>the current time,
- (ii) said desired time-of-arrival, and
- (iii) a non-negative penalty function;

wherein each of said entries comprises:

- (i) a scheduled time-of-departure, and
- (ii) a value that indicates a scheduled time-of-arrival; and

wherein said penalty function is:

- (i) monotonically increasing in travel time, wherein said travel time equals the difference between an actual time-of-arrival and an actual time-of-departure,
- (ii) monotonically increasing in  $\Delta = (\text{said actual time-of-arrival minus said desired time-of-arrival})$  over at least one interval  $(\Delta_1, \Delta_2)$  of  $\Delta$  wherein  $\Delta_2 > \Delta_1 \geq 0$ , and
- (iii) monotonically decreasing in  $\Delta$  over at least one interval  $(\Delta_3, \Delta_4)$  of  $\Delta$

wherein  $\Delta_3 < \Delta_4 \leq 0$

*and for determining a desired departure time based upon the selected one entry*

**17.** The apparatus of claim 16 wherein each of said entries also comprises:

- (iii) a first metric for said scheduled time-of-departure, and
- (iv) a second metric for said scheduled time-of-arrival; and

wherein said penalty function is based on said first metric and on said second metric.

**18.** The apparatus of claim 16 wherein said timetable is associated with a departure location, and wherein said receiver is also for receiving a current location, and wherein said processor is also for:

estimating a metric of travel time from said current location to said departure location; and

determining whether to output a signal based on:

- (i) said current time,
- (ii) the scheduled time-of-departure of the entry selected, and
- (iii) said metric.

**19. An apparatus comprising:**

a receiver for receiving a desired time-of-arrival associated with a destination location; and

a processor for selecting one of a plurality of entries of a timetable, wherein said timetable is associated with a discharge location, based on:

- (i) <sup>a</sup>the current time,
- (ii) said desired time-of-arrival,
- (iii) a first metric of estimated travel time from said discharge location to said destination location, and
- (iv) a non-negative penalty function;

wherein each of said entries comprises:

- (i) a scheduled time-of-departure, and
- (ii) a value that indicates a scheduled time-of-arrival; and

wherein said penalty function is:

(i) monotonically increasing in travel time, wherein said travel time equals the difference between an actual time-of-arrival at said destination location and an actual time-of-departure,

(ii) monotonically increasing in  $\Delta = (\text{said actual time-of-arrival at said destination location minus said desired time-of-arrival at said destination location})$  over at least one interval  $(\Delta_1, \Delta_2)$  of  $\Delta$  wherein  $\Delta_2 > \Delta_1 \geq 0$ , and

(iii) monotonically decreasing in  $\Delta$  over at least one interval  $(\Delta_3, \Delta_4)$  of  $\Delta$

wherein  $\Delta_3 < \Delta_4 \leq 0$

*and for determining a desired departure time based upon the selected one entry*

**20. The apparatus of claim 19 wherein each of said entries also comprises:**

- (iii) a second metric for said scheduled time-of-departure, and
- (iv) a third metric for said scheduled time-of-arrival; and

wherein said penalty function is based on said second metric and on said third metric.